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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
KOPEC, MARK T	
ART UNIT	**PAPER NUMBER**
1751	

DATE MAILED: 05/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 07/032,041	Applicant(s) CHU, CHING-WU	
	Examiner Mark Kopec	Art Unit 1751	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *16-94* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *16-94* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

This application is a CIP of 07/012,205 (filed 2/6/87, now ABN), which application is a CIP of 07/006,991 (filed 1/26/87, now ABN), which application is a CIP of 07/002,089 (filed 1/12/87, now ABN).

This application was involved in Interference 101,981. During the course of the interference, instant claims 16, 20-28, 47-49, 56-65 and 82-93 were designated as not corresponding to the count (Paper #131 of Interference 101,981, page 14). Only instant claim 94, directed to single phase material(s), was designated as corresponding to the count.

The status of amendments is as follows:

Claims **1-15 cancelled** and claims **16-92 added** by amendment filed 1/16/88;

Claims **93-94 added** by amendment filed 3/25/88;

The proposed amendment filed 10/1/90 (amendment to claim 94) is **not entered** in view of the judgment adverse to Chu (Interference 101,981, paper #142).

The proposed amendments filed 3/17/89 (adding proposed claims 95-97 and amending claims 28 and 60) are **not entered** in view of the denied/dismissed motions corresponding to these amendments (see Interference 101,981, Paper #131, decision on motions 15-20). See MPEP 2364, which states:

> ...If the motion is granted, the amendment is entered at the time decision on the motion is rendered. If the motion is not granted, the amendment, though left in the file, is not entered and is so marked. If the motion is granted only in part and denied as to another part, only so much of the amendment as is covered in the grant of the motion is entered, the remaining part being indicated and marked "not entered" in pencil. See 37 CFR 1.644.
>
> In each instance, the applicant is informed of the disposition of the amendment in the first action in the application following the termination of the interference. If the application is otherwise ready for issue, the applicant is notified that the application is allowed and the Notice of Allowance will be sent in due course, that prosecution is closed, and to what extent the amendment has been entered.

Claims 16-94 are currently pending.

A **substitute specification including the claims** is required pursuant to 37 CFR 1.125(a) because of the numerous entered/unentered amendments.

A substitute specification filed under 37 CFR 1.125(a) must only contain subject matter from the original specification and any previously entered amendment under 37 CFR 1.121. If the substitute specification contains additional subject matter not of record, the substitute specification must be filed under 37 CFR 1.125(b) and (c)

Under 37 CFR 1.663, claim 94 "stands finally disposed of without further action by the examiner" (Paper #142 and Paper #203 of Interference 101,981). See also 35 U.S.C. 135(a).

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 16-93 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Throughout the instant specification, numerous elements are listed as yielding superconducting compositions. According to evidence presented during Interference 101,981, (Declaration of Dr. Engler), it appears no superconducting compositions are obtained when the following elements are used in the formula given by Chu's application at page 7, line 20, namely [L1-xMx]aAbOy: when L = Sc, Ce, Pr, Tb, A = Bi, Ti, W, Zr, Ta, Nb, V or M = Sr, Ca, Mg, Hg. See also Paper #131, pages 15-16, of Interference 101,981.

Claims 29-34, 51, 52 and 76 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject

matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. As stated in the Rejection mailed 1/20/88 (Paper #8), page 5, the examiner does not find support for the claimed range "0.01 to about **0.03**".

Claims 35-46 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claim terminology "wherein the interatomic distances...satisfying the formula [La1-xBax]aCuOy" is considered indefinite in that recited formula has no listed value(s) for "x". The recited 'comparative' formula encompasses the claimed compounds (x is 0.75 to 0.5).

Applicant is invited to contact the examiner in order to discuss amendments to these claims.

Note that the prior art rejection(s) over claims 16-93 set forth in Paper #8 (Rejection mailed 1/20/88) are withdrawn. The references do not disclose (or possess with inherent certainty) the claimed superconductive characteristics.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 35-46 and 67-87 are rejected under 35 U.S.C. 102(a)/(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Bednorz et al (Z. Phys. B) or Michel (mat. Res. Bull.).

Note that Bednorz is prior art available under 102(a) only.

As acknowledged by applicant in Paper #7 (Amendment filed 1/6/88), Bednorz discloses superconductive compounds of the formula BaxLa5-xCu5O593-y) wherein x is 1 and 0.75 (Abstract; Experimental). Michel discloses an oxide corresponding to the formula [La1-xBax]aCuOy wherein x is 0.2, a=1 and y=2.68 (Abstract; Experimental).

The references are anticipatory.

With respect to claims 35-46, note the above 112, second paragraph, rejection. The instant claim language regarding atomic structure does not distinguish over the prior art superconductive compounds having identical stoichiometry.

With respect to claims 66-77, "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). "The Patent Office bears a lesser burden of proof in making out a case of prima facie obviousness for product-by-process claims because of their peculiar nature" than when a product is claimed in the conventional fashion. In re Fessmann, 489 F.2d 742, 744, 180 USPQ 324, 326 (CCPA 1974). Once the examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product. In re Marosi, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir. 1983).

In view of the foregoing, the above claims have failed to patentably distinguish over the applied art.

Applicant is reminded that any evidence to be presented in accordance with 37 C.F.R. 1.131 or 1.132 should be submitted before final rejection in order to be considered timely.

The remaining references listed on forms 892 and 1449 have been reviewed by the examiner and are considered to be cumulative to or less material than the prior art references relied upon in the rejection above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Kopec whose telephone number is (571) 272-1319. The examiner can normally be reached on Monday - Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Yogendra Gupta can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mark Kopec
Primary Examiner
Art Unit 1751

MK
May 24, 2004